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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/030,311 | 06/03/2002 | Cheryl A. Olman | 54838US010 | 8788 |

7590 12/22/2003

Stephen W Buckingham
Office of Intellectual Property Counsel
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| EXAMINER |
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CRANSON JR, JAMES W

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2875

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/030,311 | OLMAN ET AL. | |
| | Examiner | Art Unit | |
| | James W Cranson | 2875 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 15 and 18 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1-8, 14, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,598,328 Aeling et al. in view of USPN 6,024,476 to Wakeman.

Regarding claim 1 Aeling discloses a shadow back lit illuminated sign (column 3, lines 1-7) comprising: a housing having a sign face, interior surface with back surface, sign face transmits diffused light from housing, interior is diffuse reflective providing luminance uniformity (column 3 lines 1-13), back surface at depth, illuminated area large relative to depth(column 4, lines 32-39, relative geometries can be varied); a light source (12)

Aeling does not disclose having a light source connected to a light fiber. Wakeman teaches the use of light fibers in a back light sign illuminator (claim 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Aeling with a light source connected to a light fiber as taught by Wakeman since the light fiber taught by Wakeman would provide more uniform illumination and reduce heat which is well known to those skilled in the illumination arts.

Regarding claim 2, according to claim 1, wherein diffuse reflector is a film, (column 3, lines 1-65, reflective film used in conjunction with diffuse reflective film).

Regarding claim 3, according to claim 1, at least most of interior is diffuse reflective, (column 3, lines 50-55 diffuse reflective films line at least a portion of interior).

Regarding claim 4, according to claim 1, wherein back surface has concave curvature.

Modified Aeling discloses the claim invention except for a concave curvature back surface.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the modified Aeling with a concave curvature back surface since it has been held that lacking any criticality, changing the form or shape of prior art does not make the claimed invention patentable over that prior art (In re Dailey, 149 USPQ 47).

Regarding claim 5, according to claim 1, wherein light source is outside of said housing (Wakeman, column 3, lines 42-48).

Regarding claim 6, according to claim 1, wherein fiber is mounted interior beside sign face,(Wakeman in figures 1 and 3 shows fibers almost everywhere around a sign)

Regarding claim 7, according to claim 1, wherein fiber has angular light distribution that limits the amount of light transmitted to sign face. (Wakeman column 3, 60-67, frequency or spacing between fibers is determined by the size and shape of, and the desired intensity of light).

Regarding claim 8, according to claim 1, wherein said sign is a sign cabinet, Wakeman or Aeling in either's figure 1.

Regarding claims 14, 15 and 18, Modified Aeling discloses the claim invention except for the limitation that the parts are not unassembled.

It would have been obvious to one of ordinary skill in the art at the time of the invention to unassemble the modified Aeling since it has been held that lacking any criticality, to make prior art parts separable does not make the claimed invention patentable over that prior art (Nerwin v. Erlichman ,168 USPQ 177).

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,557,517 to Bolduc et al. in view of USPN 6,598,328 Aeling et al. in further view of USPN 6,024,476 to Wakeman

Regarding claims 9-11, wherein sign is mounted on a truck.

Modified Aeling does not have a truck. Bolduc teaches having an illuminated sign on a truck. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Bolduc with the sign of modified Aeling. The reason for utilizing the modified sign is that fiber optics are more efficient.

Allowable Subject Matter

Claims 12,13,16 and 17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 12 adds the limitations “ wherein said truck has a cab with an exterior surface and an interior cabin space, and said sign has a depth and is mounted in said cab such that said sign face is about flush with said exterior surface and said housing extends very little, if any, into said interior cabin space” which is not disclosed or taught in the art of record.

Claim 13 adds the limitations “ wherein the interior cabin space is at least partially defined by a headliner, and said housing is dimensioned to fit between the exterior of said truck cab and said headliner” which is not disclosed or taught in the art of record.

Claim 16 adds the limitations “ wherein said at least one interior surface panel is a plurality of interior surface panels and the diffuse reflectivity of said surface is provided by a

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plurality of diffuse reflective films, with each said film being either pre-attached to or separate from but attachable to at least one of said interior surface panels" which is not disclosed or taught in the art of record.

Claim 17 adds the limitations " wherein said at least one interior surface panel is a plurality of interior surface panels and the back surface is formed by at least two interior surface panels" which is not disclosed or taught in the art of record.

Conclusion

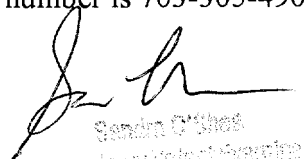
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5246261 to McCormack and USPN 5660427 to Freeman et al are examples of trucks with a headliner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W Cranson whose telephone number is 703-305-5514. The examiner can normally be reached on Mon-Fri 8:30A.M. - 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on 703-305-4939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

Jm
12/10/07


Sandra O'Shea
Supervisor/Examiner
703-305-4939